

## DISTRIBUTIONAL NOTES AND NEW RECORDS OF ACMÆODERA

(Coleoptera, Buprestidæ)

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During a recent collecting trip to southern California and southwestern Arizona made by R. G. Dahl, K. S. Hagen and the writer, a number of uncommon *Acmæodera* were taken in previously unrecorded localities. Along with these distributional records, host data, which should prove valuable for future collectors, were recorded. The writer would like to express his appreciation to Mr. Mont A. Cazier for his assistance and criticism. Thanks are also due to those who are mentioned as collectors of the specimens for allowing the writer to compile these data.

### ACMÆODERA SABINÆ Knull

*Acmæodera sabinæ* Knull, 1937. Ent. News, 48:15-16.

This desirable little species was previously recorded by Cazier<sup>1</sup> from Holtville, California. Since the Holtville specimen was taken from an irrigation ditch, it seems desirable to record additional captures and host plants for this species. Five specimens were collected at San Luis, Yuma County, Arizona, June 15, 1940 (K. S. Hagen, R. G. Dahl and W. F. Barr), on *Pluchea sericea* (Nutt.); one specimen from Gordon's Well, Imperial County, California, June 17, 1940 (W. F. Barr), swept from *Larrea tridentata* var. *glutinosa* Jep.; and one specimen from Yermo, San Bernardino County, California, June 9, 1940 (W. F. Barr) on *Larrea tridentata* var. *glutinosa* Jep. The Yermo locality extends the known distribution of the species northward by about eighty miles and the California distribution (Holtville) by about one hundred and sixty miles.

### ACMÆODERA JAGUARINA Knull

*Acmæodera jaguarina* Knull, 1938, Ann. Ent. Soc. Amer., 31(2): 135-136.

This species was described from a number of specimens, collected at Yuma, Yuma County, Arizona, in June and August. Two specimens were collected by the writer at San Luis, Yuma County, Arizona, June 15, 1940, on dead *Pluchea sericea* (Nutt.). About thirty specimens were collected at Thermal, Riverside County, California, June 17, 1940 (K. S. Hagen, R. G. Dahl and W. F.

<sup>1</sup> Cazier, M. A., 1940. Wasmann Collector, 4(1):28.

Barr), in the evening as they were flying to dead *Prosopis* branches. This is the first record of the occurrence of this recently described species in California.

#### ACMÆODERA HULLI Knull

*Acmæodera hulli* Knull, 1928, Ent. News, 39:315.

Specimens of this species were collected for the first time in California at Cedar Canyon, Providence Mountains, San Bernardino County, California, June 10, 1940 (K. S. Hagen, R. G. Dahl and W. F. Barr), on *Prosopis*. One specimen was collected by the writer at Thermal, Riverside County, California, June 17, 1940, on dead *Prosopis*. This species was described from New Mexico and has also been collected in Arizona and Sonora, Mexico. The California specimens show unusual variation in the number and arrangement of the elytral maculations. Some specimens have six isolated spots on each elytron, some seven, and others eight. One specimen has the two subapical spots united longitudinally and the two middle spots united transversely, forming elongate spots.

#### ACMÆODERA PINALORUM Knull

*Acmæodera pinalorum* Knull, 1930, Ent. News, 41:15-16.

This widely distributed Arizona species was collected for the first time in California at Cedar Canyon, Providence Mountains, San Bernardino County, California (K. S. Hagen, R. G. Dahl and W. F. Barr). Seven specimens were taken on *Prosopis*.

#### ACMÆODERA VULTUREI Knull

*Acmæodera vulturei* Knull, 1938, Ent. News, 49:228.

This species was recorded by Knull from Elizabeth Lake, Los Angeles County, California. Additional California records include: Pinon Flat, San Jacinto Mountains, Riverside County, California, May 24-26, 1939, and May 21, 1940 (B. Brookman, E. G. Linsley, E. S. Ross and C. D. Michener), taken on *Eriogonum fasciculatum* Benth. and Kernville, Kern County, California, June 7, 1940 (K. S. Hagen and W. F. Barr). Three specimens were taken on *Quercus*.

#### ACMÆODERA BIVULNERA Horn

*Acmæodera bivulnera* Horn, 1894, Proc. Cal. Acad. Sci., (2) 4:371.

Ten specimens of this uncommon species were collected at Ehrenberg, Yuma County, Arizona, June 14, 1940 (K. S. Hagen,

R. G. Dahl and W. F. Barr). One specimen was taken on *Larrea tridentata* var. *glutinosa* Jep. and the others on dead *Prosopis*.

#### ACMÆODERA YUMÆ Knull

*Acmæodera yumæ* Knull, 1937, Ohio Jour. Sci., 37(5):301.

Additional localities and hosts for this desirable species include three specimens from San Luis, Yuma County, Arizona, June 16, 1940 (W. F. Barr) taken on *Larrea tridentata* var. *glutinosa* Jep. and *Ephedra*; and five specimens from Gordon's Well, Imperial County, California, June 17, 1940 (R. G. Dahl and K. S. Hagen), taken on *Larrea tridentata* var. *glutinosa* Jep. and *Ephedra*.

#### ACMÆODERA FISHERI Cazier

*Acmæodera fisheri* Cazier, 1940, Wasmann Collector, 4(1):19-20.

Since this species was described from a single specimen it seems worth while to record its capture at Thermal, Riverside County, California, June 17, 1940 (R. G. Dahl). One specimen was taken on *Pluchea sericea* (Nutt.). This locality is about one hundred and forty-five miles south of the type locality (Mojave). On this specimen, the scales on the pronotum are confined to the extreme lateral margins as compared to the type specimen which has the scales extended on to the disk. The scaling of the under surface is less dense than in the type specimen, but is nevertheless a dense felt-like tomentum. Also the punctuation of the pronotal disk is more evident and the elytral maculations are more extensive and more irregular in the Thermal specimen.

#### ACMÆODERA PURSHIÆ Fisher

*Acmæodera purshix* Fisher, 1926, Ent. News, 37:114-115.

The range of this already wide-spread Great Basin species was further extended when it was collected at Pinon Flat, San Jacinto Mountains, Riverside County, California, May 21, 1940 (E. V. Stahl). A single specimen was collected on *Juniperus*. Previously the only southern locality was Bishop, Inyo County, California (Fenyès collection). The Pinon Flat locality extends the range southward by about two hundred and seventy miles.

#### ACMÆODERA INYOENSIS Cazier

*Acmæodera inyoensis* Cazier, 1940, Wasmann Collector, 4(1):18-19.

Two collecting trips into Nevada have extended the distribution of this species into that state. Eleven specimens were taken

in Kyle Canyon, Mount Charleston, Clark County, Nevada, May 23, 1940 (P. C. Ting, W. Reeves and M. A. Cazier), on desert mallow; two specimens were collected at Charleston Mountain Park, Clark County, Nevada, 9,000 feet, June 21, 1940 (R. M. Bohart).

#### ACMÆODERA ROSSI Cazier

*Acmæodera rossi* Cazier, 1937, Pan-Pac. Ent., 13(3):115.

Numerous specimens of this unusual *Acmæodera* were collected at the following localities: two specimens from twenty-three miles south of Vidal, Riverside County, California (K. S. Hagen and W. F. Barr) on palo verde; about ten specimens from Ehrenberg, Yuma County, Arizona, June 14, 1940 (R. G. Dahl, K. S. Hagen and W. F. Barr), collected on *Larrea tridentata* var. *glutinosa* Jep., dead *Prosopis* and dead *Acacia greggii* Gray; about thirty specimens from San Luis, Yuma County, Arizona, June 15-16, 1940 (K. S. Hagen, R. G. Dahl and W. F. Barr), taken on *Larrea tridentata* var. *glutinosa* Jep. and *Ephedra* and also found in an irrigation ditch; and seven specimens from Gordon's Well, Imperial County, California, June 17, 1940 (R. G. Dahl and W. F. Barr), taken on *Larrea tridentata* var. *glutinosa* Jep. and *Ephedra*.

As *Acmæodera* is a rather popular group and since there has not been any recent distributional paper written on it, the following state-by-state list seems desirable. The *Acmæodera* occur primarily in the southwest and adjoining states and as a result, only these few states are given for distributional purposes. The eastern and northern states have only one or two rather cosmopolitan species, i. e., *A. pulchella*, *A. ornata*, and *A. tubulus*, and therefore are not itemized individually. A summarization of the state lists shows the following:

	Total number of species	Endemics	Original type locality
California.....	64	28	46
Arizona.....	56	14	36
Texas.....	28	10	16
New Mexico.....	15	0	4
Nevada.....	15	0	1
Lower California.....	13	7	10
Utah.....	13	0	3
Northern Mexico.....	13	0	0
Colorado.....	6	0	1
Oregon.....	5	0	0
Florida.....	5	1	0

The exact type localities of *A. ornata* Fabr., *A. scalaris* Mann., *A. pulchella* Hbst., *A. flavomarginata* Gray, *A. rubronotata* Lap. & Gory, and *A. tubulus* (Fabr.) are unknown to the writer and the original literature is unavailable.

Only authentically determined specimens were used in this paper, therefore, it does not contain any of the doubtful localities which have appeared in earlier papers due to incorrect determinations.

### CALIFORNIA<sup>2</sup>

- |                                |   |
|--------------------------------|---|
| 1. <i>acuta</i> Lec.           | 33. <i>lanata</i> Horn                  |
| 2. <i>adenostomæ</i> Cazier    | 34. <i>latiflava</i> Fall               |
| 3. * <i>alacris</i> Horn       | 35. <i>liberta</i> Fall                 |
| 4. <i>aliciæ</i> Fall          | 36. <i>lucia</i> Fall                   |
| 5. <i>angelica</i> Fall        | 37. * <i>mariposa</i> Horn              |
| 6. * <i>angelica nexa</i> Fall | 38. * <i>mariposa bernardino</i> Van D. |
| 7. * <i>aurora</i> Fall        | 39. * <i>morbosa</i> Fall               |
| 8. * <i>barri</i> Cazier       | 40. * <i>nigrovittata</i> Van D.        |
| 9. <i>biedermani</i> Skinner   | 41. * <i>palmarum</i> Timberlake        |
| 10. * <i>bishopiana</i> Fall   | 42. * <i>perlanosa</i> Timberlake       |
| 11. <i>comata</i> Lec.         | 43. <i>pinalorum</i> Knull              |
| 12. <i>connexa</i> Lec.        | 44. <i>plagiaticauda</i> Horn           |
| 13. * <i>coquilletti</i> Fall  | 45. * <i>postica</i> Fall               |
| 14. <i>cribricollis</i> Horn   | 46. * <i>prorsa</i> Fall                |
| 15. * <i>dohrni</i> Horn       | 47. * <i>pubiventris</i> Horn           |
| 16. <i>dolorosa</i> Fall       | 48. <i>pulchella</i> Hbst.              |
| 17. * <i>fenyesi</i> Fall      | 49. * <i>pullata</i> Cazier             |
| 18. * <i>fisheri</i> Cazier    | 50. <i>purshix</i> Fisher               |
| 19. <i>flavosticta</i> Horn    | 51. * <i>quadriseriata</i> Fall         |
| 20. <i>gemina</i> Horn         | 52. <i>quadrivittata</i> Horn           |
| 21. <i>gibbula</i> Lec.        | 53. <i>robusta</i> Horn                 |
| 22. * <i>guttifera</i> Lec.    | 54. <i>robusta rubrosuffusa</i> Fall    |
| 23. <i>hepburni</i> Lec.       | 55. <i>rossi</i> Cazier                 |
| 24. * <i>holsteni</i> White    | 56. <i>sabinæ</i> Knull                 |
| 25. <i>hulli</i> Knull         | 57. * <i>simulata</i> Van D.            |
| 26. * <i>humeralis</i> Cazier  | 58. * <i>sinuata</i> Van D.             |
| 27. <i>insignis</i> Horn       | 59. <i>sinuata sexnotata</i> Van D.     |
| 28. <i>inyoensis</i> Cazier    | 60. * <i>tenebricosa</i> Fall           |
| 29. <i>jaguarina</i> Knull     | 61. <i>tuta</i> Horn                    |
| 30. * <i>jocosa</i> Fall       | 62. <i>vandykei</i> Fall                |
| 31. <i>junki</i> Thery         | 63. <i>vulturei</i> Knull               |
| 32. <i>labyrinthica</i> Fall   | 64. <i>yumæ</i> Knull                   |

<sup>2</sup> Species marked with an asterisk are known only from the state under which they are listed. Names in italics indicate species originally described from the state. Species listed in Roman type occur in more than one state.

## ARIZONA

- |                                    |                                |
|------------------------------------|--------------------------------|
| 1. <i>acuta</i> Lec.               | 29. <i>jaguarina</i> Knull     |
| 2. <i>aliciæ</i> Fall              | 30. <i>junki</i> Thery         |
| 3. <i>amplicollis</i> Lec.         | 31. <i>liberta</i> Fall        |
| 4. <i>angelica</i> Fall            | 32. <i>ligulata</i> Cazier     |
| 5. <i>biedermani</i> Skinner       | 33. <i>*lineipicta</i> Fall    |
| 6. <i>bivulnera</i> Horn           | 34. <i>lucia</i> Fall          |
| 7. <i>bowditchi</i> Fall           | 35. <i>*mimicata</i> Knull     |
| 8. <i>*carlota</i> Fall            | 36. <i>opacula</i> Lec.        |
| 9. <i>comata</i> Lec.              | 37. <i>ornata</i> Fabr.        |
| 10. <i>*conoidea</i> Fall          | 38. <i>*papagonis</i> Duncan   |
| 11. <i>*constricticollis</i> Knull | 39. <i>parkeri</i> Cazier      |
| 12. <i>*convicta</i> Fall          | 40. <i>pinalorum</i> Knull     |
| 13. <i>cribricollis</i> Horn       | 41. <i>pulchella</i> Hbst.     |
| 14. <i>cuneata</i> Fall            | 42. <i>quadrivittata</i> Horn  |
| 15. <i>daggetti</i> Fall           | 43. <i>recticollis</i> Fall    |
| 16. <i>decipiens</i> Lec.          | 44. <i>*resplendens</i> Van D. |
| 17. <i>*delumbus</i> Horn          | 45. <i>rossi</i> Cazier        |
| 18. <i>discalis</i> Cazier         | 46. <i>Sabinæ</i> Knull        |
| 19. <i>disjuncta</i> Fall          | 47. <i>scalaris</i> Mann.      |
| 20. <i>falli</i> Kerr              | 48. <i>*serena</i> Fall        |
| 21. <i>flavomarginata</i> Gray     | 49. <i>sparsa</i> Horn         |
| 22. <i>gemina</i> Horn             | 50. <i>stigmata</i> Horn       |
| 23. <i>gibbula</i> Lec.            | 51. <i>subbalteata</i> Lec.    |
| 24. <i>*gibbula gila</i> Knull     | 52. <i>varipilis</i> Van D.    |
| 25. <i>*griffithi</i> Fall         | 53. <i>vulturei</i> Knull      |
| 26. <i>*horni</i> Fall             | 54. <i>*wheeleri</i> Van D.    |
| 27. <i>hulli</i> Knull             | 55. <i>wickenburgana</i> Knull |
| 28. <i>insignis</i> Horn           | 56. <i>yumæ</i> Knull          |

## TEXAS

- |                                     |                                    |
|-------------------------------------|------------------------------------|
| 1. <i>auritincta</i> Fall           | 15. <i>miliaris</i> Horn           |
| 2. <i>bowditchi</i> Fall            | 16. <i>*neglecta</i> Fall          |
| 3. <i>*consors</i> Horn             | 17. <i>*obtusa</i> Horn            |
| 4. <i>cribricollis</i> Horn         | 18. <i>ornata</i> Fabr.            |
| 5. <i>discalis</i> Cazier           | 19. <i>paradisjuncta</i> Knull     |
| 6. <i>disjuncta</i> Fall            | 20. <i>*perforata</i> Cazier       |
| 7. <i>falli</i> Kerr                | 21. <i>pulchella</i> Hbst.         |
| 8. <i>*flavinigrapunctata</i> Knull | 22. <i>quadrivittata</i> Horn      |
| 9. <i>flavomarginata</i> Gray       | 23. <i>rubronotata</i> Lap. & Gory |
| 10. <i>gibbula</i> Lec.             | 24. <i>scalaris</i> Mann.          |
| 11. <i>*hæmorrhœa</i> Lec.          | 25. <i>*texana</i> Lec.            |
| 12. <i>junki</i> Thery              | 26. <i>tubulus</i> (Fabr.)         |
| 13. <i>*macra</i> Horn              | 27. <i>*uvaldensis</i> Knull       |
| 14. <i>maculifera</i> Horn          | 28. <i>*wenzeli</i> Van D.         |

## NEW MEXICO

- |                            |                               |
|----------------------------|-------------------------------|
| 1. <i>amplicollis</i> Lec. | 9. <i>pulchella</i> Hbst.     |
| 2. <i>auritincta</i> Fall  | 10. <i>quadrivittata</i> Horn |
| 3. <i>decipiens</i> Lec.   | 11. <i>recticollis</i> Fall   |
| 4. <i>gibbula</i> Lec.     | 12. <i>scalaris</i> Mann.     |
| 5. <i>hulli</i> Knull      | 13. <i>sparsa</i> Horn        |
| 6. <i>lucia</i> Fall       | 14. <i>subbalteata</i> Lec.   |
| 7. <i>maculifera</i> Horn  | 15. <i>variegata</i> Lec.     |
| 8. <i>opacula</i> Lec.     |                               |

## NEVADA

- |                             |                                      |
|-----------------------------|--------------------------------------|
| 1. <i>connexa</i> Lec.      | 9. <i>ornata</i> Fabr.               |
| 2. <i>cribricollis</i> Horn | 10. <i>purshiae</i> Fisher           |
| 3. <i>gemina</i> Horn       | 11. <i>robusta</i> Horn              |
| 4. <i>hepburni</i> Lec.     | 12. <i>robusta rubrosuffusa</i> Fall |
| 5. <i>inyoensis</i> Cazier  | 13. <i>tuta</i> Horn                 |
| 6. <i>labyrinthica</i> Fall | 14. <i>vandykei</i> Fall             |
| 7. <i>lanata</i> Horn       | 15. <i>variegata</i> Lec.            |
| 8. <i>latiflava</i> Fall    |                                      |

## LOWER CALIFORNIA

- |                               |                                |
|-------------------------------|--------------------------------|
| 1. <i>*clausa</i> Horn        | 8. <i>*opinabilis</i> Fall     |
| 2. <i>*faceta</i> Fall        | 9. <i>*rubescens</i> Schaeffer |
| 3. <i>flavomarginata</i> Gray | 10. <i>*scapularis</i> Horn    |
| 4. <i>flavosticta</i> Horn    | 11. <i>stigmata</i> Horn       |
| 5. <i>gibbula</i> Lec.        | 12. <i>*vanduzei</i> Van D.    |
| 6. <i>insignis</i> Horn       | 13. <i>varipilis</i> Van D.    |
| 7. <i>*lucana</i> Van D.      |                                |

## UTAH

- |                             |                              |
|-----------------------------|------------------------------|
| 1. <i>acuta</i> Lec.        | 8. <i>purshiae</i> Fisher    |
| 2. <i>bowditchi</i> Fall    | 9. <i>quadrivittata</i> Horn |
| 3. <i>cuneata</i> Fall      | 10. <i>sparsa</i> Horn       |
| 4. <i>dolorosa</i> Fall     | 11. <i>tuta</i> Horn         |
| 5. <i>labyrinthica</i> Fall | 12. <i>vandykei</i> Fall     |
| 6. <i>lanata</i> Horn       | 13. <i>variegata</i> Lec.    |
| 7. <i>lucia</i> Fall        |                              |

## NORTHERN MEXICO

- |                               |                                   |
|-------------------------------|-----------------------------------|
| 1. <i>bivulnera</i> Horn      | 8. <i>quadrivittata</i> Horn      |
| 2. <i>daggetti</i> Fall       | 9. <i>rubronotata</i> Lap. & Gory |
| 3. <i>gibbula</i> Lec.        | 10. <i>scalaris</i> Mann          |
| 4. <i>hulli</i> Knull         | 11. <i>sparsa</i> Horn            |
| 5. <i>miliaris</i> Horn       | 12. <i>subbalteata</i> Lec.       |
| 6. <i>paradisjuncta</i> Knull | 13. <i>wickenburgana</i> Knull    |
| 7. <i>parkeri</i> Cazier      |                                   |

## COLORADO

- |                    |                       |
|--------------------|-----------------------|
| 1. ligulata Cazier | 4. quadrivittata Horn |
| 2. lucia Fall      | 5. sparsa Horn        |
| 3. pulchella Hbst. | 6. variegata Lec.     |

## OREGON

- |                       |                             |
|-----------------------|-----------------------------|
| 1. angelica Fall      | 4. sinuata sexnotata Van D. |
| 2. connexa Lec.       | 5. variegata Lec.           |
| 3. plagiaticauda Horn |                             |

## FLORIDA

- |                       |                    |
|-----------------------|--------------------|
| 1. confusa Fisher     | 4. pulchella Hbst. |
| 2. *marginotata Chev. | 5. tubulus (Fabr.) |
| 3. ornata Fabr.       |                    |

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 THE GENUS ORTHOPODOMYIA THEOBALD IN CALIFORNIA

(Diptera, Culicidæ)

BY WILLIAM C. REEVES

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While making observations and collections of *Aedes varipalpus* (Coq.), "the Pacific Coast tree-hole mosquito," in southern California during February, 1940, larvæ and adults of the genus *Orthopodomyia* were encountered. The larvæ were in tree holes of cottonwood, *Populus fremontii* Wats., which had been filled by rains. Previous to this time *A. varipalpus* had been the only culicid known to inhabit tree holes in California.

*Orthopodomyia* is a small genus of mosquitoes whose members breed exclusively in tree holes. Only two species are known to occur in the United States, *Orthopodomyia signifera* (Coq.) and *Orthopodomyia alba* Baker. The former was described by Coquillett (1896) from the District of Columbia. Its present distribution includes most of the eastern and southern states from Massachusetts to Texas. A previous but unrecognized record of this species in California was made by Clara Ludlow (1906), who reported "*Culex(?) signifera*" from Benicia Barracks, Solano County. Howard, Dyar, and Knab (1917) stated, however, "We quote the California locality cited by Dr. Ludlow